Appendix C:
Server Rack Configuration and Power Provisioning Specifications

• Standard Rack Electrical Provisioning is 4 receptacles per cabinet for a combined rating of not to exceed 48 Amps (redundant) at 208 volts with a combined total of not more than 8 breaker positions. The electrical service is served from separate power panels.
• Additional electrical provisioning is available upon request. This service is provided at an extra cost and performed using labor and material rates.

Server Rack Configuration – Server Room
• (14) Fourteen, APC NetShelter SX enclosures, medium density up to 12kw (10kw de-rated).
• All APC racks are 48RU, 600mm (narrow width), set 24 inches on center, with keyed-alike doors and side panels, Model AR3107.
• Zone 4 Anchorage.   Two APC 870-11101A bolt-down brackets with 3/8" diameter Hilti Kwik Bold 3, embedded 2.5" at the base of each rack (interior installation).
• All APC racks in each rack row are bolted together (ganged) using hardware supplied with the racks. The racks are ganged at two points on the frame, both at the front and rear of each rack.
• All unused, vertical spaces on the front of the racks will be filled with APC Modular, 1RU, Blanking Panels, Model AR8136BLK. This is to prevent hot air from recalculating through the rack to the equipment cool air intake.

Rack Power Feeds – Server Room
• G6000 wire mold set above each of the rack rows is used to distribute power to the racks in the Server Room.
• (2) Two, single-phase, 20 amp, 120 volt duplex circuits per rack row.
• (4) Four, single-phase, 30 amp, 208 volt, dedicated circuits per rack.
• (4) Four, APC Switched Rack Power Strips per rack, Model AP7841.
• All of the power strips are single-phase, 30 amp (24 amp de-rated), 208 volt.
• All of the outlets on the power strip are type IEC 320 C13 (208V).
• Twenty-one (21) outlets per power strip; 84 total outlets per rack.
• All rack power strips are "switched". Switched rack power strips provide load metering combined with controlled on/off switching by individual outlets for remote power re-cycling. All remote power recycling will be done by the Information Services – Operations Center (ITS-OC). See Appendix E
• Zero Signal Reference Ground Grid (all racks and equipment is grounded).

Convenience (wall) outlets – Server Room
• (6) 20 Amp, NEMA 5-15 wall outlets for crash carts and client laptop connections.
• (2) 20 Amp, NEMA 5-15 wall outlets for technician laptops and tools.

MPOE/Telco Room Power Feeds:
• (2) Two dedicated, 1-phase, 30 amp, 208 volt circuits will be provided for Rack #1.
• (2) Two dedicated, 1-phase, 30 amp, 208 volt Metered rack power strips, model AP7841, will be added to Rack #1.

Cable trays for Networking Cables:
• Supports backbone and horizontal cable distribution in the Server Room
• Ladder type, steel, UL Classified cable tray will be manufactured by Chatsworth Products Inc.
• 18" wide x 1" high, open-bottom cable tray. Cross members are set at 9 inch intervals.
• Cable tray will be supplied over each of the rack rows. Each end of this cable tray will be anchored to the Server room walls. And the tray will be supported by ½" threaded rod from the ceiling or roof structure